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REMARKS

By this Amendment, claims 2 and 41 have been amended. No claims are cancelled or added. Accordingly, claims 2, 4, 6-9, 11, 35, 36, 40 and 41 are presented for further examination. No new matter has been added.

Claim Rejections – 35 USC § 112, Second Paragraph

Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

By this amendment, claim 2 has been amend to change “a portion of copper” to ---copper from said copper-containing compound ---. Applicants respectfully submit that the rejection is avoided by claim amendments.

Double Patenting

Claims 2, 4, 6-9, 11, 35, 36, 40 and 41 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatable over claims of U.S. Patent No. 7026308 to Gavin et al.

Applicants respectfully request that the rejection be held in abeyance until indication of allowable subject matter. At that time, Applicants will revisit the issue.

Rejections under 35 USC §102/103

Claims 2, 4 and 6-9 stand rejected under 35 USC §102(b) as anticipated by, or in the alternative under 35 USC §103(a) as obvious over U.S. Patent No. 5,540,860 to Hosseini et al.

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alone or if necessary, in further view of the specification and examples of that reference to demonstrate inherency. Applicants respectfully submit that this rejection is untenable and should be withdrawn.

Hosseini et al. disclose discrete particles of copper pyrithione and the method of making the same. The references discussed in the background portion of Hosseini et al. are directed to paint compositions containing copper pyrithione and copper compounds along with other components commonly used in paints. Applicants respectfully submit that the teaching of the formation of discrete copper pyrithione particles does not disclose or suggest composite particles having a shell and a core wherein the core and shell have different compositions, much less those as instantly claimed. Further, it is Applicants' position that the teaching of paints containing both copper pyrithione and a copper compound along with components such as resins, solvents, does not disclose or suggest any composite particles either. This is so because there is no force to bring copper pyrithione and copper compound together in paints, particularly in view of the co-presence of numerous other components in the paint, which may intervene the formation of composite particles of any kind, much less the formation of composite particles as instantly claimed.

Accordingly, contrary to the assertion of the Office Action, the claimed composition by itself is distinguishable from those disclosed in the prior art. Indeed, instead of pointing to any specific disclosure in the prior art about any composite particles, the Office Action compared the process disclosed in Hosseini et al. in making copper pyrithione particles with the process disclosed in the instant application in making composite particles, and concluded that the copper pyrithione particles disclosed in Hosseini et al. must inherently have a core and shell structure as instantly claimed because the prior art particles and the particles recited in the claims are allegedly produced by identical or substantially identical processes.

In response to the suggestion of the Office Action that the prior art process and the process to prepare the claimed composite particles are identical or substantially identical, Applicants outlined the differences between these processes and explained why the prior art process produces discrete particles that contain only copper pyrithione, whereas the processes as

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disclosed in the instant application produces composite particles having a core and shell structure as recited in the claims in the amendments/remarks filed on September 10, 2009. In other words, Applicants explained why the copper pyrithione particles disclosed in Hosseini do not inherently have a core and shell structure as recited in the claims.

In view of the above discussion, Applicants respectfully submit that the Hosseini et al. product itself is different from, and not suggestive of, the instantly claimed composition. Therefore, it is respectfully requested that the rejection be withdrawn.

Rejections under 35 USC §103

1. Hosseini et al. and Gavin et al.

Claims 2, 4, 6-9, 11 and 41 stand rejected under 35 USC 103(a) as being unpatentable over Hosseini et al. alone or in view of the specification and U.S. Patent No. 5,342,437 to Gavin et al.

As discussed in detail above, there is no disclosure or suggestion in Hosseini et al. of a composition comprising composite particles having a core consisting essentially of surface oxidized copper, cuprous oxide or copper hydroxide and a shell consisting essentially of copper pyrithione. Moreover, Hosseini et al. does not disclose a fatty acid coating of the shell.

Gavin et al. discloses that the incorporation into a zinc pyrithione and cuprous oxide containing paint of a carboxylic acid reduces the tendency of the paint to gel relative to a comparative paint without the carboxylic acid. The reference is completely silent as to what effect, if any, that carboxylic acid would have on a paint containing copper pyrithione, much less any effect that the carboxylic acid would have on the gellation of copper pyrithione during the process to prepare copper pyrithione. Accordingly, there is no motivation for one of ordinary skill in the art to incorporate the carboxylic acid disclosed in Gavin et al. into the process of making copper pyrithione disclosed in Hosseini et al.

Further, even if a person skilled in the art did utilize a fatty acid in the Hosseini process as suggested by the Examiner, the particles formed would be simple copper pyrithione coated

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with a fatty acid, which is completely different from the composite particles recited in the instant claims. Accordingly, when viewed singly or in combination, neither Hosseini et al. nor Gavin et al. suggest composite particles of the instantly claimed invention. Therefore, the rejection of the instant claims based upon that combination is believed to be untenable and should be withdrawn.

2. Hosseini et al. and Kappock et al.

Claims 2, 4, 6-9, 35, 36 and 40 are rejected under 35 USC §103(a) as being unpatentable over Hosseini et al. alone or in view of the specification (e.g. page 7, figures and examples) and examples (e.g. example 1) to demonstrate inherency and Kappock et al. U.S. Patent No. 5,518,774 (5/96). Applicants respectfully submit that this rejection is untenable and should be withdrawn.

Kappock et al. teaches transchelation of copper oxide with a soluble pyrithione salt to produce an insoluble pyrithione salt such as copper pyrithione in a formulated paint composition to provide in-can preservation during storage of the paint. (See col. 3, lines 12-32) This disclosure does not teach or suggest copper pyrithione in a composite particle having a core consisting essentially of surface-oxidized copper powder, cuprous oxide, copper hydroxide and combinations thereof.

In the background portion, Hosseini et al. discloses that paints containing copper pyrithione and copper salts are known. But Hosseini et al. does not disclose or suggest any copper salts presented in the paint composition would be suitable for use in the process to make copper pyrithione particles. On the contrary, at column 2, lines 59-60, Hosseini et al. discloses that the copper salt is suitable any salt containing copper that is soluble in the carrier employed in the reaction.

Since Hosseini et al. specifically teaches the use of soluble copper compound (in the process to produce copper pyrithione particles, and it is well known that copper oxide is an insoluble compound, there is no motivation for a person skilled in the art to substitute the soluble copper compound required by Hosseini et al. process with an insoluble copper compound such as

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copper oxide disclosed in Hosseini et al. Doing so will be against the specific teachings of Hosseini et al.

In addition, Kappock et al. disclose the use of copper oxide and copper sulfate in the patentee's composition. Applicants respectfully submit that copper oxide normally refers to copper (II) oxide, which differs from cuprous oxide. Accordingly, Kappock et al. does not disclose or suggest any of the core materials recited in the composite particles, namely, cuprous oxide, surface oxidized copper powder, copper hydroxide, and combinations thereof. Therefore, even if the teachings of Hosseini et al. and Kappock et al. were combined, the combination would not disclose or suggest any composite particles containing a core consisting essentially of surface oxidized copper powder, cuprous oxide, copper hydroxide, and combinations thereof. Accordingly, Applicants respectfully submit that this rejection is untenable and should be withdrawn.

In summary, Applicants submit that none of the references, alone or in combination, anticipate or make obvious the invention as presently claimed and that the application is now in condition for allowance. Therefore, Applicants respectfully request consideration of the amended claims, and an early receipt of a Notice of Allowance of the claims as amended.

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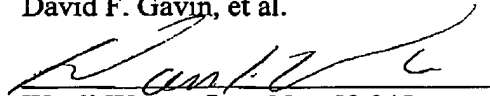
CONCLUSION

Applicants respectfully request consideration of the claims in their amended form, and an early receipt of a Notice of Allowance thereof. Any fees due with this Reply may be charged to our Deposit Account No. 23-1665 under Customer Number 27267.

Respectfully submitted,

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